Proposed Energy Efficiency Retrofit and LIC Financing Program for Ontario

December 10, 2019

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AMO Association of Municipalities Ontario

Clean Air Partnership

TORONTO

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Consortium Partners

Consortium Member	Background
	**Independent Electricity System Operator (IESO)** operates Ontario's $20B/yr electricity Market. The IESO has designed/delivered award-winning energy efficiency programs delivering 1.8 TWh of energy savings, with a reach of ~87k homes and ~18k of businesses in 2017.
	**Association of Municipalities of Ontario (AMO)** enables Ontario's 444 municipalities to work together to achieve shared goals and meet common challenges through policy development, cost-saving programs, conferences and training opportunities.
	**Clean Air Partnership (CAP)** is a charitable environmental organization whose mission is to help municipalities become sustainable, resilient, vibrant communities where resources are used efficiently.
	**City of Toronto's (CoT)** HELP program has been running the first widespread Canadian LIC program since 2014 allowing homeowners in Toronto take on retrofits that help reduce their energy consumption and their bills.
	**HRAI** is a non-profit national trade association that represents more than 1,300 member companies, 900 across Ontario in the heating, ventilation, air conditioning and refrigeration (HVACR) industry.

Context - Municipalities are Committing to Climate Action

- Municipalities have passed climate emergencies and adopted aggressive city-wide GHG reduction targets to align with the Paris agreement (i.e. 80% - 100% GHG reductions by 2050)

- Most communities have 3 major sources of emissions:
  - Buildings
  - Transportation
  - Waste

- Municipalities have identified building retrofit programs as a critical action in their energy/climate plans

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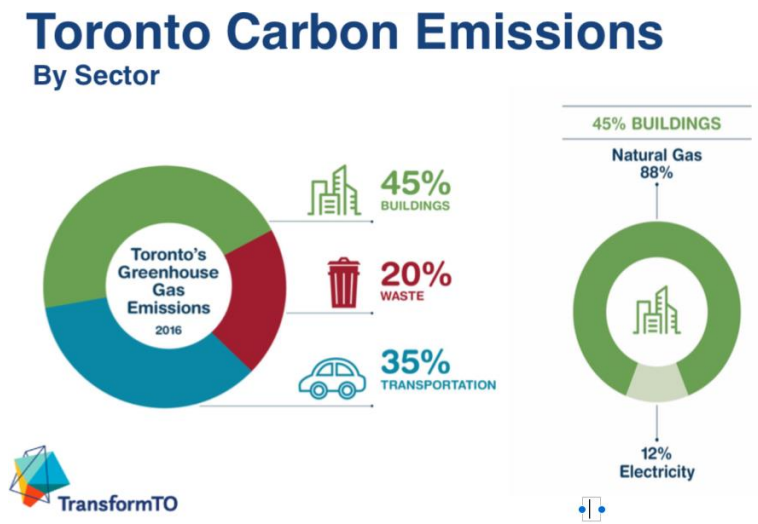
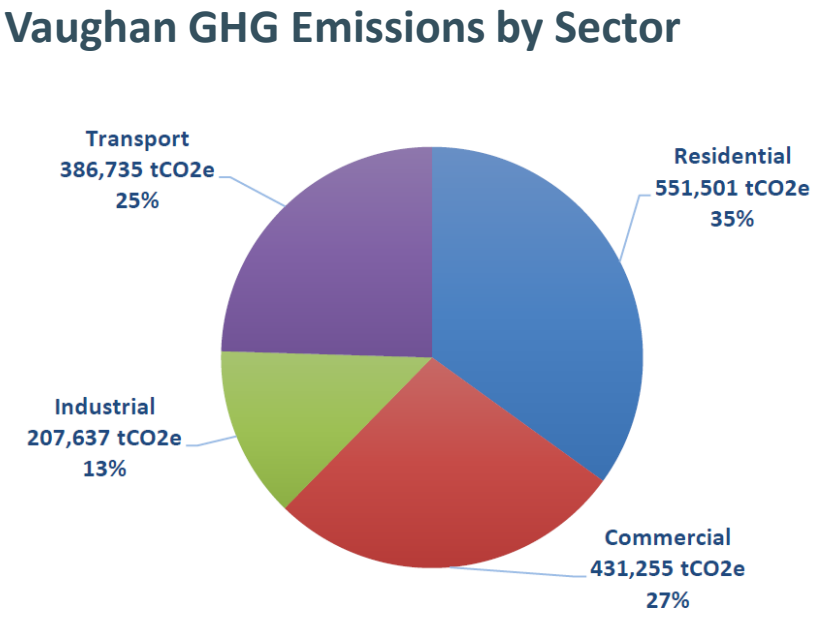
Buildings are a major source of GHGs in communities

- Buildings accounted for 22% of Ontario's GHGs in 2017
- Buildings (residential and commercial) can account for over half of a municipality's GHG emissions (e.g. 45% in Toronto, similar in other municipalities)





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Rationale for Retrofits

- Energy use in buildings is a considerable cost to citizens annually (for example, $4.5B in Toronto, or $1,720 per person per year; $13.5 billion in energy costs across GGHS; $24.6 billion across Ontario)
- The vast majority of energy spending does not stay in the municipality (80% of Toronto's energy spending leaves the city, draining $3.5bn from the local economy annually, $1,338 per person per year)
- Achieving GHG reduction targets requires addressing energy use within existing building stock
- Moving from energy dollars that leave communities towards energy efficiency efforts that benefit the local community (these jobs cant be outsourced or be bought through amazon)

Benefits of Retrofits: For the Homeowner

- Energy cost avoidance
- More comfortable and healthier home
- Increased property value
- Reduced vulnerability to energy price fluctuations
- Greater resilience to power outages and extreme temperatures

Benefits of Retrofits: For the Municipality/Community

- Reduces energy use and GHG reductions towards targets
- Generates local economic benefits and jobs
- Reduces pressures on energy infrastructure
- Reduces local air pollution
- Reduces vulnerability to energy and carbon cost increases

Background on LIC programs

- Local Improvement Charge (LIC) programs allow homeowners to receive low-interest and long-term loans to make energy, gas, and water efficiency improvements (Municipal Act O. Reg. 586/06)
- The loan is repaid through the property tax bill, and attached to the property – not the individual.
- The City of Toronto has been delivering an LIC program for energy efficiency, called the Home Energy Loan Program (HELP), since 2014

Challenges of Delivering Building Energy Retrofit Programs

- Developing a comprehensive building energy retrofit program is not easy (to say the least)
- Residential sector is challenging in that it is disbursed and getting uptake is a challenge (both in reaching target audience as well as getting uptake)
- Who has ever looked forward to doing a renovation?
- Addressing the building envelope and fuel switching requires longer term pay backs
- Requires management of different contractors (HVAC, Insulation, Windows, Renewable Energy, etc.)
- The market has come to expect rebates not financing

Advantage of LIC Financing

- Low-interest, long term loan for the homeowner
- Loan is tied to the property and transfers when the home is sold
- Homeowner can pay off remaining balance at any time without penalty
- Municipalities can achieve GHGs targets
- No net cost to the municipalities
- Financing allows for scale up

LIC Program Steps for a Participating Homeowner

1)1. Pre-qualification

2. Energy Assessment and Funding Request

3. Property Owner Agreement

4. Financing Schedule; Selecting & Managing Contractors; Completing Improvements; Verifying Improvements; Finalizing Financing

5. LIC Repayment

Goals, Objectives, and Measures of Success

Goal

Deliver a province-wide program for financing of renewable energy and energy efficiency upgrades to homes that results in GHG reductions, energy cost savings and economic development.

Objectives

To provide municipalities with a home energy efficiency retrofit program that is flexible and adaptable to local circumstances and capacity

To provide customers with a simple, user-friendly program through a "one-window" service delivery model

To achieve deep GHG reductions through targeting old building stock for deep energy efficiency retrofits

Measures of Success

1. Customer satisfaction
2. Number of homes
3. Aggregated energy/water savings (number of kWh, of natural gas saved, and cubic litres saved)
4. GHG reductions
5. Total size of loans ($) provided to projects
6. Number and geographic spread of municipalities involved
7. Diverse demographic reach (low income, indigenous populations, seniors and others)
8. Other socioeconomic co-benefits (TBD)

DRAFT- Proposed High Level Design

Program Eligibility

Criteria	Eligibility	Rationale
Type of dwelling	Single-family dwellings, Multi-Unit Residential Buildings (MURBS), and commercial properties *(TBD)*	Customers facing high upfront capital costs
Age of Home	Pre 1980-90s construction (priority) & post 1990s homes with savings potential	Older homes are the worst performers for energy efficiency
Credit and Tax Standing	Good credit and tax standing	Reduces risk of defaults on payments.

Eligible Technologies

Examples of eligible technologies, to be reviewed on an annual basis:

i. **Thermal envelope upgrades:** Attic, wall and basement insulation, windows, doors, air-sealing and other deep retrofits
ii. **Mechanical systems:** Furnace and boilers, water heaters, thermostats and controls, drain water heat recovery systems, heat pumps, and geoexchange
iii. **Water efficiency:** Low flow toilets
iv. **Energy storage technologies and EV chargers:** (Details TBD)
v. **Renewable Energy:** Solar PV
vi. **Other:** New energy efficient (certified) products as they become available will be considered as additional eligible technologies

Eligible Costs

1. Cost of Technology
2. Cost of Installation
3. Cost of Audit *(if not covered by other program rebate/incentive)*
4. Other associated costs associated with eligible measures costs (TBC)

Communications and Marketing

- An Ontario-wide marketing campaign will be coordinated to enable holistic and consistent messaging and deliver message to as wide an audience at the least cost.
- Promoting the program will require a team approach with contractors being a key outreach opportunity.

Role of Municipalities:

- To minimize costs on marketing, municipalities can assess their asset registry and identify opportunities to market this program on their own infrastructure (ex. CoT uses HELP program advertising on bus shelters).
- Generic marketing material will be created which will allow each municipality to customize through adding logos to the standard templates.

Roles of Property Owners, Channel Partners, Stakeholders, and Community Groups

- The consortium will need to partner with others to market the program. The goal will be to identify and act on promotion opportunities and track what gets uptake to inform future outreach efforts.

Municipal Onboarding

- AMO/CAP will aim to streamline municipal onboarding and define a template for necessary onboarding steps.
- Would work with municipalities that are exploring different business models/programs to ensure that there is alignment with the proposed Ontario LIC program, particularly to explore synergies; avoid customer confusion while also encouraging innovation.
- City of Toronto will support with providing municipal onboarding and program delivery advice, taking into account consideration timing/resourcing constraints.
- The staff/admin requirements/burden that would be required within municipalities will depend on the role of the LIC Administrator and Energy Concierge as well as property tax/repayment structure in place.

Customer Process

The Energy Concierge, a role that CAP would take on, will provide support to property in order to guide applicants through the different stages of the process.

Role of the Energy Concierge is to ensure a good customer experience through:

i) **Streamlining program application and approval processes**

ii) **Providing objective guidance to customers re contractor selection/costs/management**

iii) **Providing market research on some of the key questions/issues from customers/and creating resources/processes to address them**

iii) **Gathering and documenting feedback on program improvements/issues**

Municipal Role

The 3rd party delivery model is designed to reduce the burden of program delivery on municipalities. However, the program would require municipalities to:

1. Pass an LIC by-law through council
2. Eligible measures and financial verification requirements (part of by-law)
3. Final approval/rejection of application/contract with property owner
4. Set up the structure to attach the loan to their property tax system for repayment
5. Manage the payments to homeowners once they are accepted into the program
6. Identifying possible avenues to support uptake to the program via municipal and/or community outreach and promotion opportunities (bottom-up marketing approaches)

Questions for Municipalities

1. What do you think is your municipality's state of readiness?
2. Is there interest in participating in this 3rd party delivered program, given the necessary minimum requirements for the municipality to participate?
   - (i.e. pass LIC bylaw, attach loan to property, collect payment)
3. Considering the proposed structure and the municipal requirements what barriers/what other issues should be considered as part of the program design/delivery?
4. Who are the others who should be engaged in this work?
5. Contact Gaby at gkalapos@cleanairpartnership.org to organize a chat within your municipality.